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## Notes on Insects and Other Arthropods from the Islands of Molokai and Maui, Hawaii

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Board of Agriculture and Forestry

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The insects and other arthropods listed in this paper were collected on Molokai during the periods May 29 to June 5 and October 8 to 13, and on Maui June 5 to 13, 1943. The Thysanoptera have been reported on in another paper.<sup>1</sup> My thanks are extended to the following persons who have kindly identified most of the specimens: D. T. Fullaway (parasitic Hymenoptera), O. H. Swezey (Coleoptera, some of the Diptera, Cicadellidae, Delphacidae, Cixiidae), F. X. Williams (Hymenoptera, most of the Diptera), E. C. Zimmerman (weevils, Hemiptera), E. O. Essig (Aphididae), H. Morrison (Coccidae), L. M. Russell (Aleyrodidae), R. V. Chamberlin (Araneida) and H. E. Ewing and E. A. McGregor (Acarina). Species apparently here recorded for the first time from Molokai or Maui are marked with an asterisk.

### ARANEIDA

- \**Latrodectus geometricus* Koch, south central Molokai, May 31.
- \**Latrodectus mactans hesperus* Chamberlin and Ivie, south central Molokai, May 31.

### ACARINA

- Anystis* sp., probably *A. agilis* Bks., near edge of Waikolu Valley, Molokai, June 3, ex *Metrosideros* sp.; Wailuku, Maui, June 13, ex leaves of hibiscus.
- Tetranychus* sp., south central Molokai, May 31, ex leaves *Datura stramonium* L.
- Tetranychus* sp., nearest *bimaculatus* Harv., Kawela, Molokai, June 2, ex tomato leaves.

### ORTHOPTERA

#### Tettigoniidae

- Elimaea punctifera* (Walk.), 1, eastern Molokai, May 30.

<sup>1</sup> See p. 113.

## Sarcophagidae

\**Helicobia helicus* (Townsend), 2, Kawela, Molokai, June 2.

## Calliphoridae

\**Chrysomya rufifascies* (Macq.), 1, Nahiku, Maui, June 10.

## Anthomyiidae

*Lispa metatarsalis* Thom., 1, near edge of Waikolu Valley, Molokai, June 3.

*Lispocephala* sp., 1, near edge of Waikolu Valley, Molokai, June 3.

*Lispocephala* sp., 1, near edge of Waikolu Valley, Molokai, Oct. 10.

\**Ophyra chalcogaster* Wied., 1, Hana, Maui, June 9.

## Borboridae

*Leptocera ferruginata* Stenhouse?, 5, Kaunakakai, Molokai, May 29.

*Leptocera* sp., 4, Olinda, Maui, June 12.

## Sciomyzidae

*Sciomyza hawaiiensis* Grims., 1, Halawa Valley, \*Molokai, June 4; 1, Wailuku, Maui, June 6; 1, Iao Valley, Maui, June 6.

## Ortalidae

*Scholastes bimaculatus* Hend., 1, Kaunakakai, Molokai, June 5.

## Trypetidae

*Ceratitis capitata* (Wied.), 1, Iao Valley, Maui, June 6.

*Dacus cucurbitae* Coq., 3, south central Molokai, May 31; 1, Iao Valley, Maui, June 6; 1, Kaupo, Maui, June 9; 1, Wailuku, Maui, June 13.

*Eutreta xanthochaeta* Aldr., 1, Halawa Valley, Molokai, June 4; 1, Nahiku, Maui, June 10.

## Ephydriidae

*Brachydeutera hebes* Cress., 5, Kawela, Molokai, June 2.

\**Notophila insularis* Grims., 7, south central Molokai, May 31.

*Procanace nigroviridis* Cress., 2, Halawa Valley, Molokai, May 30.

\**Scatella bryani* Cress., 3, Kawela, Molokai, June 2.

\**Scatella hawaiiensis* Grims., 1, Olinda, Maui, June 12.

*Scatella warreni* Cress., 10, Halawa Valley, \*Molokai, May 30; 1, Kahakuloa, Maui, June 12.

## Drosophilidae

\**Drosophila spinofemora* P. & W., 1, Halawa Valley, Molokai, June 4; 1, Haiku, Maui, June 7; 3, Hana, Maui, June 9.

## Agromyzidae

*Liriomyza pusilla* (Meig.), 2, near edge of Waikolu Valley, Molokai, Oct. 10.

*Ophiomyia lantanae* (Frogg.), 1, Halawa Valley, Molokai, June 4.

## Milichiidae

*Milichiella lactipennis* (Loew), 1, south central Molokai, May 31.

## Chloropidae

\**Rhodesiella tarsalis* Adams, Hana, Maui, June 8 (1), June 9 (1).

## HYMENOPTERA

## Braconidae

\**Apanteles dignus* Mues., 1, Kawela, Molokai, June 2, reared from lepidopterous larva in tomato leaf.

*Apanteles* sp. (parasite of *Opogona*), 1, Halawa Valley, Molokai, June 4; 1, near edge of Waikolu Valley, Molokai, Oct. 10; 1, Hana, Maui, June 9.

\**Chelonus blackburni* Cam., 1, Kaupo, Maui, June 9.

\**Ischiogonus pallidiceps* Perk., 1, south central Molokai, May 31; 2, Iao Valley, Maui, June 6.

\**Opius lantanae* Bridw., 1, Kaupo, Maui, June 9.

## Ichneumonidae

*Amblyteles* sp., 1, near edge of Waikolu Valley, Molokai, June 3.

*Casinaria infesta* (Cress.), 1, Kaunakakai, Molokai, June 4.

*Cremastus flavo-orbitalis* (Cam.), 1, near edge of Waikolu Valley, Molokai, June 3; 1, Kaupo, Maui, June 9.

*Idechthis* sp., 2, eastern Molokai, May 30; 1, south central Molokai, May 31; 1, Wailuku, Maui, June 6; 1, Hana, Maui, June 9; 1, Kahakuloa, Maui, June 12.

*Pristomerus hawaiiensis* Perk., 1, near edge of Waikolu Valley, Molokai, Oct. 10; 1, Hana, Maui, June 9; 1, Kaupo, Maui, June 9.

## Scelionidae

*Anteris nigricornis* Ashm., 1, near edge of Waikolu Valley, Molokai, Oct. 10.

## Chalcididae

*Brachymeria obscurata* (Walk.), 1, Kaunakakai, Molokai, June 4; 1, Kainalu, Molokai, Oct. 12; Hana, Maui, June 8 (1) and 10 (1).

*Dirhinus giffardii* Silv., 1, Kaunakakai, Molokai, June 4.